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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,460	04/15/2004	Michael J. Chambers	CHAMBERS 4-4	8315

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EXAMINER	
MILLER, BRANDON J	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/825,460	CHAMBERS ET AL.	
	Examiner	Art Unit	
	Brandon J. Miller	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,11-17 and 19-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,11-17 and 19-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7-8, 11-13, 17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Mishio.

Regarding claim 1 Sato teaches a mobile communication device, comprising: a main body; and a camera module (see abstract and paragraph [0039]). Sato teaches a camera module, coupled to the main body and configured for movement with respect thereto between a retracted position and an exposed position (see paragraphs [0042] & [0061]). Sato teaches a camera module being rotatable in the exposed position about at least one axis of rotation (see paragraphs [0015] & [0042]). Sato does not specifically teach detecting a position of the camera module relative to the main body; and a memory with at least one stored program and a microprocessor by which the program can be executed, the program being started automatically when the means for detecting detects a certain position of the camera module. Mishio teaches detecting a position of the camera module relative to the main body; and a memory with at least one stored program and a microprocessor by which the program can be executed, the program being started automatically when the means for detecting detects a certain position of the camera module (see paragraphs [0031], [0032] & [0042]). It would have been obvious to one of ordinary skill in the

art to make the device adapt to include detecting a position of the camera module relative to the main body; and a memory with at least one stored program and a microprocessor by which the program can be executed, the program being started automatically when the means for detecting detects a certain position of the camera module because the camera module in Sato is rotatable and it would allow for a camera module of a mobile device to be used in an efficient fashion by automatically controlling input instructions based on the detected position of the camera module.

Regarding claim 2 Sato teaches a camera module that translates to move between the retracted position and the exposed position (see paragraph [0014] & [0065]).

Regarding claim 3 Sato teaches wherein the at least one axis of rotation is essentially perpendicular to a direction of the movement (see paragraph [0015] and FIG. 1).

Regarding claim 4 Sato teaches the camera module is rotatable at least form a front side position to a back side position in the exposed position (see paragraph [0015] and FIG. 1).

Regarding claim 7 Sato teaches a user-releasable retainer for retaining the camera module in the retracted position (see paragraph [0063]).

Regarding claim 8 Sato teaches a spring mechanism that automatically ejects the camera module from the retracted position to the exposed position (see paragraph [0084]).

Regarding claim 11 Mishio teaches activating a power supply to the camera module (see claim 4, page 4).

Regarding claim 12 Mishio teaches an electronic detector (see paragraph 0024).

Regarding claim 13 Sato and Mishio teach a device as recited in claim 1 except for wherein the program configures a display of the mobile communication device for an operation selected from the group consisting of: digital photography, and video telephony. Mishio does

teach a digital camera and digital video (see paragraph [0004]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the program configures a display of the mobile communication device for an operation selected from the group consisting of: digital photography, and video telephony because it would allow for a camera module of a mobile device to be used in an efficient fashion by automatically controlling programming based on the detected position of the camera module.

Regarding claim 17 Sato teaches a method of operating a retractable rotatable camera module (see paragraph [0014] & [0015]). Sato teaches deploying the camera module by releasing a user-releasable retainer (see paragraph [0063] & [0065]). Sato teaches the camera module to move from a retracted position to an exposed position with respect to a main body of an associated mobile communication device (see paragraph [0061] & [0065]). Sato teaches rotating the camera module about at least one axis of rotation (see paragraph [0015] & [0077]). Sato does not specifically teach detecting a position of a camera module relative to the main body; and automatically starting a program stored within a memory of a mobile communication device based on detecting a certain position of the camera module. Mishio teaches detecting a position of a camera module relative to the main body; and automatically starting a program stored within a memory of a mobile communication device based on detecting a certain position of the camera module (see paragraphs [0031], [0032] & [0042]). It would have been obvious to one of ordinary skill in the art to make the device adapt to include detecting a position of a camera module relative to the main body; and automatically starting a program stored within a memory of a mobile communication device based on detecting a certain position of the camera module because the camera module in Sato is rotatable and it would allow for a camera module

of a mobile device to be used in an efficient fashion by automatically controlling input instructions based on the detected position of the camera module.

Regarding claim 19 Sato teaches detecting a rotational orientation of the camera module of the camera module (see paragraph [0015] & [0050].

Regarding claim 20 Mishio teaches automatically configuring a display of the mobile communication device for a particular application (see paragraph [0031]).

Claims 14-15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Saari.

Regarding claim 14 Sato teaches a main body having attaching means for attaching a camera module (see paragraph [0001]). Sato teaches a camera module having complementary attaching means to the main body, such that the camera module is movable with respect to the main body from a retracted position to an exposed position (see paragraphs [0001] & [0061). Sato teaches a camera module that is rotatable in the exposed position about at least one axis of rotation (see paragraphs [0015] & [0042]). Sato does not specifically teach attaching means comprising means for automatically moving the camera module from the retracted position to the exposed position employing electrical energy. Saari teaches automatically moving a camera module employing electrical energy (see col. 4, lines 33-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include automatically moving the camera module from the retracted position to the exposed position employing electrical energy because Sato teaches manually moving a camera module from a retracted position to an exposed position (see paragraph [0061]) and Saari teaches using electric

energy to move a camera module instead of manually and it would allow for improved photographic versatility of a mobile phone.

Regarding claim 15 Sato teaches rotating the camera module in the exposed position about at least one axis of rotation (see paragraphs [0014] & [0015]).

Regarding claim 21 Sato and Saari teach a device as recited in claim 14 except for automatically moving the camera module from the retracted position to the exposed position employs a motor. Sato does teach moving a camera module from a retracted position to an exposed position (see paragraph [0061]). Saari does teach automatically moving a camera module employing a motor (see col. 4, lines 33-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include automatically moving the camera module from the retracted position to the exposed position employs a motor because Sato teaches manually moving a camera module from a retracted position to an exposed position (see paragraph [0061]) and Saari teaches using electric energy to move a camera module instead of manually and it would allow for improved photographic versatility of a mobile phone.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Odagiri.

Regarding claim 16 Sato teaches a camera module, comprising: attaching means for attaching the camera module to complementary attaching means of a mobile communication device (see paragraphs [0001] & [0061]). Sato teaches a camera, coupled to the attaching means, the camera movable with respect to a main body of the mobile communication device form a retracted position to an exposed position (see paragraphs [0014] & [0061]). Sato teaches a

camera module that is rotatable in the exposed position about at least one axis of rotation (see paragraph [0015] & [0042]). Sato does not specifically teach attaching means allowing the camera module to be wholly detachable from the mobile communication device. Odagiri teaches attaching means allowing the camera module to be wholly detachable from the mobile communication device (see paragraph [0147]). It would have been obvious to one of ordinary skill in the art at the time the device was made to make the camera module in Sato adapt to include allowing the camera module to be wholly detachable from the mobile communication device because Sato teaches a movable camera module that is retractable (see paragraph [0061]) and this would allow for improved switching between various modes of a mobile communication system.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Mishio and Sawada.

Regarding claim 5 Sato and Mishio teach a device as recited in claim 1 except for wherein the camera module is rotatable about at least two axes of rotation in the exposed position. Sawada teaches a camera module that is rotatable about at least two axes of rotation in an exposed position (see paragraphs [0012] & [0073]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the rotation be about at least two axes of rotation because this would allow for improved adjustment of an imaging direction of the imaging lens portion.

Regarding claim 6 Sawada teaches two axes of rotation that are essentially perpendicular (see paragraphs [0012] & [0073]).

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Saari and Ahn.

Regarding claim 22 Sato and Saari teach a device as recited in claim 14 except for automatically moving the camera module from the retracted position to the exposed position employs an electromagnet. Sato does teach moving a camera module from a retracted position to an exposed position (see paragraph [0061]). Saari does teach automatically moving a camera module employing electronic means (see col. 4, lines 33-40). Ahn teaches a position sensing means that employs a magnetic sensor that outputs electrical signals (see col. 3, lines 13-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include automatically moving the camera module from the retracted position to the exposed position employs an electromagnet because it would allow for improved photographic versatility of a mobile phone.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Mishio and Nishimoto.

Regarding claim 23 Sato and Mishio teach a device as recited in claim 1 except for activating a flash of the mobile communication device. Nishimoto teaches a flash coupled to a camera module (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include activating a flash of the mobile communication device because this would allow for improved picture quality in a portable telephone apparatus with a camera.

Response to Arguments

Applicant's arguments with respect to claims 1-8, 11-17, and 19-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okuzako et al. U.S. Pub. No.: US 2004/0116167 A1 discloses a portable information processing apparatus.

Lee U.S. Pub. No.: US 2004/0198433 A1 discloses a camera lens assembly and portable wireless terminal comprising the same.

Ohe et al. U.S. Pub. No.: US 2003/0090579 A1 discloses a mobile information terminal device and camera unit.

Arai et al. Patent No.: US 6,904,298 B2 discloses a mobile information communicating terminal device having video camera.

Mizuta U.S. Pub. No.: US 2003/0171133 A1 discloses a slide-type portable communication apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 23, 2006

CHARLES APPIAH
PRIMARY EXAMINER